SEQUENCE LISTING

<110> Olivera, Baldomero M.
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<120> Uses of Alpha-Conotoxin Peptides

<130> Uses of Alpha-Conotoxins

<140>
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<150> US 60/080,588
<151> 1998-04-03

<150> US 60/070,153
<151> 1997-12-31

<160> 13

<170> PatentIn Ver. 2.0

<210> 1
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:generic alpha-conotoxin sequence

<220>
<221> PEPTIDE
<222> (1)..(6)
<223> Xaa at residue 1 is des-Xaa, Tyr, mono-iodo-Tyr or di-iodo-Tyr; Xaa at residue 2 is any amino acid; Xaa at residue 5 is any amino acid; Xaa at residue 6 is any amino acid.

<220>
<221> PEPTIDE
<222> (8)..(12)
<223> Xaa at residues 8, 10, 11 and 12 may be any amino acid; Xaa at residues 13, 14, 15 and 16 may be des-Xaa or any amino acid.

<400> 1

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  1               5                  10                  15

Cys
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<210> 2
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<212> PRT
<213> Conus magus

<400> 2

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Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu His Ser Asn Leu Cys
 1               5                   10                  15


<210> 3
<211> 17
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<220>
<223> Description of Artificial Sequence:Tyr derivative
      of C. magus MII

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Tyr Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu His Ser Asn Leu
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Cys



<210> 4
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<220>
<223> Description of Artificial Sequence:FAT derivative
      of C. magus MII

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<210> 5
<211> 16
<212> PRT
<213> Conus aulicus

<400> 5
Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Asp Tyr Cys
 1               5                   10                  15


<210> 6
<211> 17
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<220>
<223> Description of Artificial Sequence:Tyr derivative
      of C. aulicus AuIA

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Cys



<210> 7
<211> 15
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<212> PRT
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<400> 7
Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Asp Cys
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<210> 8
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<212> PRT
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<400> 8
Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Gly Tyr Cys
  1               5                   10                  15


<210> 9
<211> 16
<212> PRT
<213> Conus purpurascens

<400> 9
Gly Cys Cys Ser Leu Pro Pro Cys Ala Ala Asn Asn Pro Asp Tyr Cys
  1               5                   10                  15


<210> 10
<211> 16
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<220>
<223> Description of Artificial Sequence:A10L derivative
      of C. purpurascens PnIA

<400> 10
Gly Cys Cys Ser Leu Pro Pro Cys Ala Leu Asn Asn Pro Asp Tyr Cys
  1               5                   10                  15


<210> 11
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:N11S derivative
      of C. purpurascens PnIA

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<210> 12
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<210> 13
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<212> PRT
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